

**REMARKS**

The Office Action mailed February 4, 2009, has been received and reviewed. Claims 26-61 are currently pending in the application. Claims 26-61 stand rejected. Applicant has amended no claims, and respectfully requests reconsideration of the application as presented herein. No new matter has been added.

**35 U.S.C. § 103(a) Obviousness Rejections**

Obviousness Rejection Based on U.S. Pat. Publ. No. 2003/0060195 A1 and U.S. Pat. No. 5,873,046

Claims 26-50 and 56-61 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0060195 A1 to Dent (“Dent”) in view of U.S. Patent No. 5,873,046 to Bronner (“Bronner”).

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* MPEP § 2143.03. Additionally, there must be “a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements” in the manner claimed. *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicants’ disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of claims 26-50 and 56-61 are improper because the elements for a *prima facie* case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art reference must teach or suggest all the claims limitations.

**Regarding independent claims 26, 40 and 58,** Applicant’s independent claims 26, 40

and 58 include claim elements not taught or suggested in the cited references. Applicant's independent claims 26, 40 and 58 each respectively recite, in part, "*further circuitry being operable to receive **an intermediate frequency (IF) common to each mode of operation** and to supply a further signal to further RF circuitry*" (Applicant's independent claims 26 and 58) and "*further circuitry being operable to receive **an intermediate frequency (IF) common to each mode of operation** and to supply a further signal to the first and the second terminal RF stages*" (Applicant's independent claim 40). Applicant respectfully asserts that neither Dent nor Bronner, either individually or in any proper combination, teach or suggest such claim limitations.

The Office Action concedes:

In regards to claims 26, 40, and 58, ... Dent, however, does not specifically disclose further circuitry, the further circuitry being operable to receive an intermediate frequency (IF) **common to each mode of operation** and to supply a further signal to further RF circuitry. (Office Action, p. 3; emphasis added).

The Office Action then alleges:

**Bronner**, however, **does disclose further circuitry** (See Fig. 3 and integrated dual-mode intermediate-frequency (IF) amplifier 330), the further circuitry being **operable to receive an intermediate frequency (IF) common to each mode (e.g., analog mode and digital mode) of operation** and to supply a further signal to further RF circuitry (See col. 1 lines 6-10, col. 2 lines 25-30, and col. 6 lines 39-58). (Office Action, pp. 3-4; emphasis added).

Applicant respectfully disagrees. Applicant's "modes" are clearly claimed in independent claims 26, 40 and 58 as a "**first mode at a first carrier frequency**" and a "**second mode at a second carrier frequency different from the first carrier frequency.**" Accordingly, Applicant's "modes" are clearly distinguished based upon the "carrier frequency." In contrast, the alleged "modes" relied upon in the Office Action as taught by Bronner are clearly based on "**modulation schemes**" and not Applicant's claimed "**carrier frequenc[ies]**." Specifically, the Office Action alleges Bronner's "analog mode and digital mode" teach or suggest Applicant's claimed invention including "*further circuitry being operable to receive **an intermediate frequency (IF) common to each mode of operation** and to supply a further signal to further RF circuitry*" (Applicant's independent claims 26 and 58) and "*further circuitry being operable to receive **an intermediate frequency (IF) common to each mode of operation** and to supply a*

further signal to the first and the second terminal RF stages” (Applicant’s independent claim 40).

However, Bronner’s analog mode and digital mode are clearly “modulation” based. Specifically, Bronner teaches:

As used herein, ***“analog” is used to refer to modulation schemes***, or wireless communications networks employing modulation schemes, which do not require the preservation of the characteristics of a transmitted signal’s amplitude envelope, such as frequency modulation (FM), whereby limiting/non-linear amplifiers may be employed. Also, ***“digital” is used to refer to modulation schemes***, or wireless communications networks employing modulation schemes, which require the preservation of the characteristics of a transmitted signal’s amplitude envelope, whereby linear, or automatic-gain-control (“AGC”), amplifiers may be employed. (Bronner, col. 2, lns. 50-61; emphasis added).

Applicant respectfully notes that the alleged “integrated dual-mode intermediate-frequency (IF) amplifier 330” of Bronner, as cited in the Office Action, actually teaches of ***“an IF amplification system and method that allows the mobile station to process both analog and digital input signals in a common amplifier stage.”*** (Bronner, col. 3, lns. 28-30; emphasis added). Clearly the “modulation” modes (*e.g.*, analog modulation scheme and digital modulation scheme) as disclosed by Bronner do not teach Applicant’s claimed “modes” of ***“first mode at a first carrier frequency”*** and a ***“second mode at a second carrier frequency different from the first carrier frequency”*** as recited in Applicant’s independent claims 26, 40 and 58.

Therefore, since neither Dent nor Bronner teach or suggest Applicant’s claimed invention including ***“further circuitry being operable to receive an intermediate frequency (IF) common to each mode of operation and to supply a further signal to further RF circuitry”*** (Applicant’s independent claims 26 and 58) and ***“further circuitry being operable to receive an intermediate frequency (IF) common to each mode of operation and to supply a further signal to the first and the second terminal RF stages”*** (Applicant’s independent claim 40), these references, either individually or in any proper combination, **cannot** render obvious, under 35 U.S.C. §103, Applicant’s invention as presently claimed in independent claims 26, 40 and 58. Accordingly, Applicant respectfully requests the rejections of independent claims 26, 40 and 58 be withdrawn.

**Regarding dependent claims 27-39 and 56-60**, the nonobviousness of independent claim 26 precludes a rejection of claims 27-39 and 56-60 which depend therefrom because a

dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 26 and claims 27-39 and 56-60 which depend therefrom.

**Regarding dependent claims 41-50 and 61**, the nonobviousness of independent claim 40 precludes a rejection of claims 41-50 and 61 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 40 and claims 41-50 and 61 which depend therefrom.

**Obviousness Rejection Based on U.S. Pat. Publ. No. 2003/0060195 A1, U.S. Pat. No. 5,873,046 and U.S. Pat. No. 5,943,324**

Claims 51-55 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dent in view of Bronner and yet in further view of U.S. Patent No. 5,535,432 to Ramesh *et al.* (“Ramesh”).

The nonobviousness of independent claim 26 precludes a rejection of claims 51-55 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 26 and claims 51-55 which depend therefrom.

**Finality of Next Office Action Precluded**

Applicant has traversed the rejection of claims 26-61 by argument and not amendment. Therefore, **the finality of the next office action would be improper** as Applicant is entitled to an examination on the merits and to amend as a matter of right. In the present Office Action, Applicant’s independent claims 26, 40 and 58 were not completely examined as to **all** of the elements. Accordingly, Applicant submits that this omission to examine all elements of Applicant’s claimed invention amounts to a failure to articulate a *prima facie* case of unpatentability and the burden to rebut this “rejection” has not yet shifted to the Applicant.

Consequently, a next office action cannot properly be made final since only then would the Applicant be obligated to rebut the rejection, presuming that such an office action sets forth a *prima facie* case. (MPEP § 706.07(a)).

### CONCLUSION

Claims 26-61 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicant's undersigned representative.

Respectfully submitted,

Dated: May 4, 2009

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